

Where Do We Go From Here?



Do You Have Your
Support Materials?

Is Your #2 Pencil
Sharpened?



OPI
Office of Public
Instruction
January 2005

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Support Materials

- Interpretive Guide
- Released Item Samples
 - With answers and standards
 - Item statistics (Roster & Item Level Report)
- Rubrics
- Model Papers (Exemplars)
- MT Math and Reading Standards
- Sample student generic report

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Types of Items on CRT

- **Multiple Choice:** Reading and Mathematics aligned with a MT Standard
- **Short Answer:** Only Mathematics
- **Constructed Response:** Reading and Mathematics
 - Called **open response** in iAnalyze

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Review of Items

- Reading (4, 8, 10)
- Mathematics (4, 8, 10)
- Items and Rubrics
- Differences in Levels
- How To Help Students



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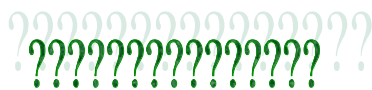
Strategies To Understand Results

- Overview/review of items
- Examine the
 - Item statistics: Roster & Item Level Report
 - Standard statistics: iAnalyze
- Detailed examination of selected items
 - Possible answers
 - Items and answers within a standard

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Roster & Item Level Report

- o Which multiple choice items had the highest percentage of learners proficient or advanced?
- o Which MT Standards do these items measure?
- o Which multiple choice items had the lowest percentage of learner proficient or advanced?
- o WHY?



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Questions for the Roster & Item Level Report

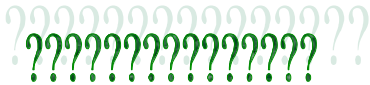
- What MT content standard does each item measure?
- Examine these items. Are there any surprises?
- How do the grade level averages for the items compare with school, district, and state averages?



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Questions for the Roster & Item Level Report

- For students who are proficient or advanced, which items did they get wrong?
- For students who are novice or nearing proficiency, which items did they get correct?
- Are there any surprises?



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Link to School Summary Report

- Refer to page 8 in the MontCAS Phase 2 booklet
- Examine the subtest results in the school summary report.
- Which standards have the highest scores?
- Which standards have the lowest scores?
- Circle the standard designations for the ten lowest and highest items in the class roster.
- Are the item statistics in your class roster report consistent with the school trends?

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Analyzing Multiple-Choice Items

- What MT Standard is being assessed?
- What do students need to know to answer the question?
- What strategies would they use to get the correct answer?
- What misconceptions or incorrect processes might lead to each incorrect response?
- What are the implications for instruction?

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Analyzing Multiple-Choice Items

As a group, do an item analysis on Item #53 from the 4th Grade Math CRT.

53. Jania is making 12 bracelets. She needs 8 red beads and 16 blue beads for each bracelet. How many beads does Jania need in all?

- A. 36
- B. 72
- C. 192
- D. 288



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4th Grade Math: #53

- The correct answer is Letter D.
- The State average was 35%
- MT Math Standard: 1



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Analyzing Constructed-Response Items

- What do students need to know to answer the question?
- What are the main requirements for a scale 4 answer?
- What would be needed to convert the scale 3 response to a scale 4 response?
- What are the implications for instruction?

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Analyzing Constructed-Response Items

As a group, do an item analysis on a #22 from the 4th Grade CRT. Refer to the story "The Top of the Tree."

22. Someday Courtney will own the ranch. Tell if you think Courtney will keep the ranch or if she will sell it. Give at least THREE details from the story to explain your answer.



Strategies To Impact Instruction

- Understand items and trends in item results
 - What are the strengths and needs?
 - What misconceptions/misinformation caused an incorrect answer?
 - Can you explain these trends in relation to classroom practices?
 - What needs to be reinforced or re-taught?
 - What can you do differently?

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Reading Teaching Strategies For All Grades



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Reading Teaching Strategies For All Grades

- Multiple step questions every day and follow through on complete responses
- Outlining in other subject
- Teach decoding and self-questioning strategies



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Reading Teaching Strategies For All Grades

- Reciprocal teaching: students learn skills of predicting, questioning, clarifying, and summarizing
- Concept mapping or outlining a passage
- Read question before reading passage
- Practice using rubric with this type of item and response

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Reading Teaching Strategies For All Grades

- Turn passive reader into active readers who
 - Give themselves a purpose for reading by reading the question first
 - Visualize what they are reading about
 - Visualize themselves in the reading
 - Take notes while reading
 - Paraphrase
 - Summarize
 - Question



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Reading Teaching Strategies For All Grades

- Practice written responses to reading selections.
 - Regularly
 - Use a rubric similar to the sample one
 - As structure for the response
 - To evaluate the response
 - Ask students to underline or highlight the parts of their answers that fit the rubric.

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Our Reading Teaching Strategies

Our Ideas:

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.....

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Math Teaching Strategies For All Grades



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Math Teaching Strategies For All Grades

- Align assessment and instruction closely
- Emphasize reasoning, communication, and problem solving
- Engage students in self-assessment
- Use performance tasks as instructional tools

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Math Teaching Strategies For All Grades

- Encourage collaboration of performance tasks in heterogeneous groups
- Practice reading in the context of math instruction
 - For example: Articles containing graphs
- Explicit instruction in math writing
- Differentiate instruction



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Math Teaching Strategies For All Grades

- Reading math is important
- Use math vocabulary **and** explicitly teach math synonyms
 - Translation, rotation, reflection instead of slide, turn, and flip
- Practice “story” problems or problems in sentence form
- Practice going beyond answer to logical and sequential justification.

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Math Teaching Strategies For All Grades

4 Step Method of Problem Solving

1. Understand
2. Plan
3. Solve
4. Check

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Our Math Teaching Strategies

Our Ideas:

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.....

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Where Do We Go From Here?

The 2005 CRT will be given
March 7 to March 30.



Be sure those #2 pencils
are sharpened!

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